

## **ABSTRACT**

Methods and compositions are disclosed for confirming and quantifying the presence of a specific kind of microorganism in a sample of material. Hybridization and polymerase chain reaction (PCR) techniques are applied to identify the presence of the specific microorganism in cultures grown in most probable number and serial dilution methods, after calibration of the techniques using blank and control samples. For example, samples of animal feed can be cultured and analyzed to determine the quantity of specific probiotic microorganisms present in the feed.